Remarks

Claims 1-20 are pending in this application. Claims 1-20 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,827,644 to Stevenson et al. (hereinafter "Stevenson"). Applicants respectfully traverse the rejection.

The Examiner relies upon Stevenson to disclose a power transmission. However, Stevenson does not disclose, amongst other features, "a selectable braking one-way clutch operative to brake rotation of one of said members of said planetary gear sets when the transmission is in one of reverse and first speed" as positively recited in Applicants' claims 1, 12 and 20.

In rejecting claims 1, 10, 12, 13, 19 and 20, the Examiner called Applicants' attention to Figure 13 and specifically to element 240' to disclose a bi-directional one-way clutch operative to brake rotation of one of said members of said planetary gear sets when the transmission is in one of reverse and forward speed.

However, Col. 8, lines 31-43 of Stevenson states that element 240' is a selectively engageable OWC (torque transmitting mechanism) that must be in series with a friction launch low/reverse clutch (torque transmitting mechanism 236) in order to launch in both reverse and forward gears. "[W] hen the reverse gear is established, the grounding torque from the friction launch low/reverse clutch 236 is transferred through the engaged OWC 240' as if a direct connect was established. In first gear launch, the first gear grounding torque is through the OWC 240' as if it was a one-way clutch commonly used in conventional automatic transmissions." See Stevenson, col. 8, lines 36-43.

In contrast, claims 1, 12 and 20 of the present application require "a selectable braking one-way clutch operative to brake rotation of one of said members of said planetary gear sets when the transmission is in one of reverse and forward speed", which *eliminates* the need for the combination of a low/reverse braking clutch and a selectable one-way clutch. Not only may the selectively reversible braking one-way clutch function to freewheel in one rotational direction but it also functions to brake in an opposite direction thereby being useable in reverse and forward speeds while having fewer parts than the friction launch low/reverse clutch 236 and one-way clutch 240' of Stevenson. The selectable braking one-way clutch is also described in the specification as a "diode"

(paragraphs 0036,0037), which is not a brake and a clutch in series, but rather is a single diode as shown in Figure 4. As a result, Applicants' claimed invention improves transmission costs, packaging and mass.

Moreover, the Examiner called Applicants' attention to element 245 to disclose "a first rotating input clutch operatively engageable with the input shaft, wherein said first rotating input clutch is slipped for launching the vehicle in first speed" and element 236 to disclose "a second rotating input clutch engageable with the input shaft, wherein said second rotating input clutch is slipped for launching the vehicle in reverse." However, according to Figure 13 of Stevenson, elements 236 and 245 are illustrated as reaction clutches (i.e., brakes) grounded to housing 280. Further, col. 7, lines 47-48 states that element 236 is a "stationary grounding-type torque transmitting mechanism" or a reaction clutch (or a brake). Reaction clutches (or brakes) cannot be input clutches because reaction clutches stop or prevent rotation.

"Input clutch" is a commonly used term of art in the powertrain engineering field, which refers to a clutch that transfers input torque into a transmission or transfer case when engaged. The term "input" is taken from the source of power, i.e. an input shaft. Thus, an input clutch is typically a clutch attached to an input shaft, usually in a direct manner, but which may also transfer ratioed torque indirectly from the input gear set in a manner to allow input torque from an input shaft into the transmission or transfer case. An input clutch never brings an element to zero speed. Therefore, those skilled in the art would not describe brakes 236, 245 as input clutches. Supporting Affidavits may be presented if needed.

Furthermore, Applicants' claims require "a first rotating input clutch operatively engageable with the input shaft, wherein said first rotating input clutch is slipped for launching the vehicle in first speed" and "a second rotating input clutch engageable with the input shaft, wherein said second rotating input clutch is slipped for launching the vehicle in reverse." However, Stevenson teaches slipping brakes 236, 245 (not input clutches) for launching into forward or reverse. Specifically, col. 8, lines 24-29 of Stevenson states that "torque transmitting mechanism 236 is used to launch in reverse ... Alternatively, torque transmitting member mechanism 236 could be used by itself as the starting clutch for both forward and reverse launch," and col. 8, lines 55-57 generally

states that grounding clutch-type torque transmitting mechanism 245 may be used for forward launch. Therefore, Stevenson does not teach "a first rotating input clutch [that] is slipped for launching the vehicle in first speed" and "a second rotating input clutch [that] is slipped for launching the vehicle in reverse."

Accordingly, the features of "a selectable braking one-way clutch operative to brake rotation of one of said members of said planetary gear sets when the transmission is in one of reverse and forward speed," "a first rotating input clutch operatively engageable with the input shaft, wherein said first rotating input clutch is slipped for launching the vehicle in first speed," and "a second rotating input clutch engageable with the input shaft, wherein said second rotating input clutch is slipped for launching the vehicle in reverse," amongst other features, are not disclosed in Stevenson. For at least the reasons stated above, claims 1, 12 and 20 are allowable over the prior art. Withdrawal of the rejection is respectfully requested.

Claims 2-11 ultimately depend from claim 1 and are therefore allowable for at least the same reasons that claim 1 is allowable. Withdrawal of the rejection is respectfully requested.

Claims 13-19 ultimately depend from claim 12 and are therefore allowable for at least the same reasons that claim 12 is allowable. Withdrawal of the rejection is respectfully requested.

CONCLUSION

This Amendment is believed to be fully responsive to the Office Action mailed December 14, 2005. The remarks in support of the rejected claims are believed to place this application in condition for allowance, which action is respectfully requested.

Please charge any fees associated with this amendment to deposit account 07-0960.

Respectfully submitted,

SAMIE ET AL.

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